

EXHIBIT D

(part 2 of 2 due to file size)

To: All AAON Sales Representatives

October 1, 2001

NEW PROMOTIONAL LITERATURE

The RL Series 40 to 230 Tons for Air Cooled, Evaporative Cooled or Water Cooled

Enclosed with this memo are 50 copies of the new RL Series full color promotional literature. Read this over completely. Get ready for the two RL product sessions that will be held here in Tulsa this month to answer all your questions.

Notice the photo on page 2 is an air cooled unit being built in the West Tulsa plant. The centerfold of product features also shows those taken of evaporative cooled models, as well as, many of the common features of all the models.

RL Product Hi-Lites

In this session you will see a complete evaporative cooled unit. All of the features will be reviewed in a unique manner that you will be able to "take home with you" in your pocket. You will not forget this presentation.

RL Software

The RL product has many of the features that you always expect from AAON. It also will have new and unrivaled features that you must learn how to select and use to our best advantage. The RL software will be extensively demonstrated in this session. With the RL Series you have fan options that will be presented to you by the software, with the corresponding sound levels.

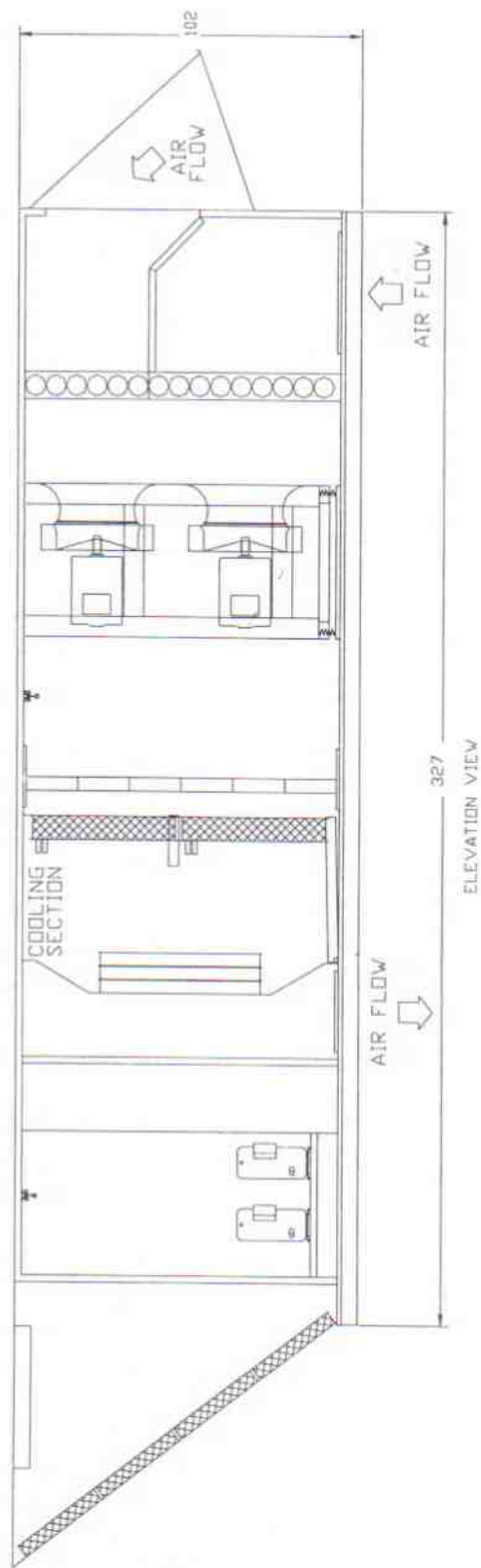
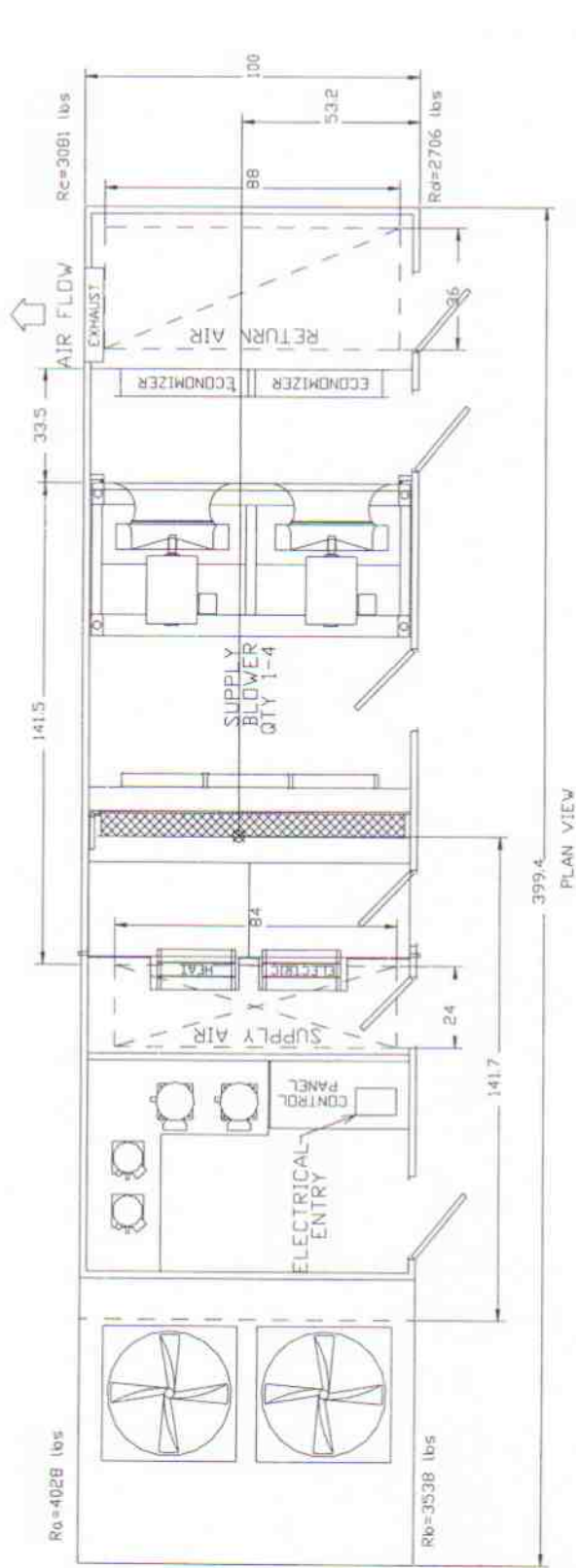
The Unit Rating sheet gives you all the performance information you need including sound information.

The overall dimensional drawing of the selection will also be an output of the software. No guessing or waiting to get information back from the factory to get the customer the dimensional data they always want immediately.

Get your questions ready - Don't miss any of the RL sessions. We look forward to seeing you at the Sales meeting.



Jim Parro
Marketing Manager



AADON inc.

TULSA OKLAHOMA

Total Weight: 13353 / Shipping Weight: 13353

Configurator: RL-045-3-0-0A02-133A000-D00-EBF-A00-00000000-00-00000000B

JOB NAME: TYPICAL DRAWINGS TO SHOW FEATURE OPTIONS

PURCHASER:

PURCHASE ORDER:

Rep Contact: NOT FOR JOB USE

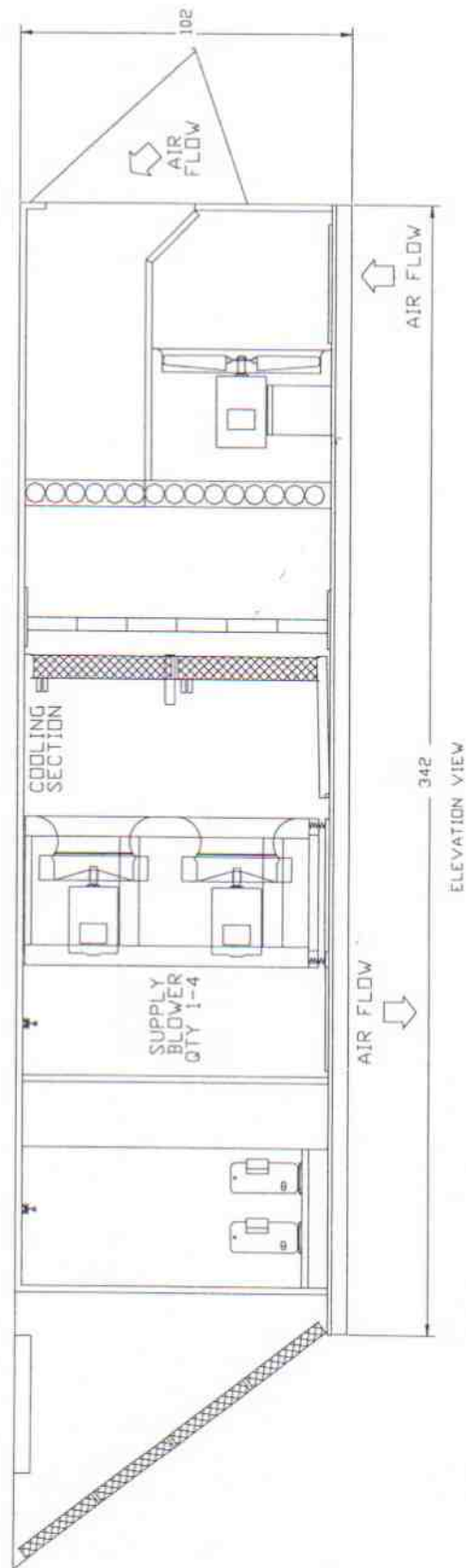
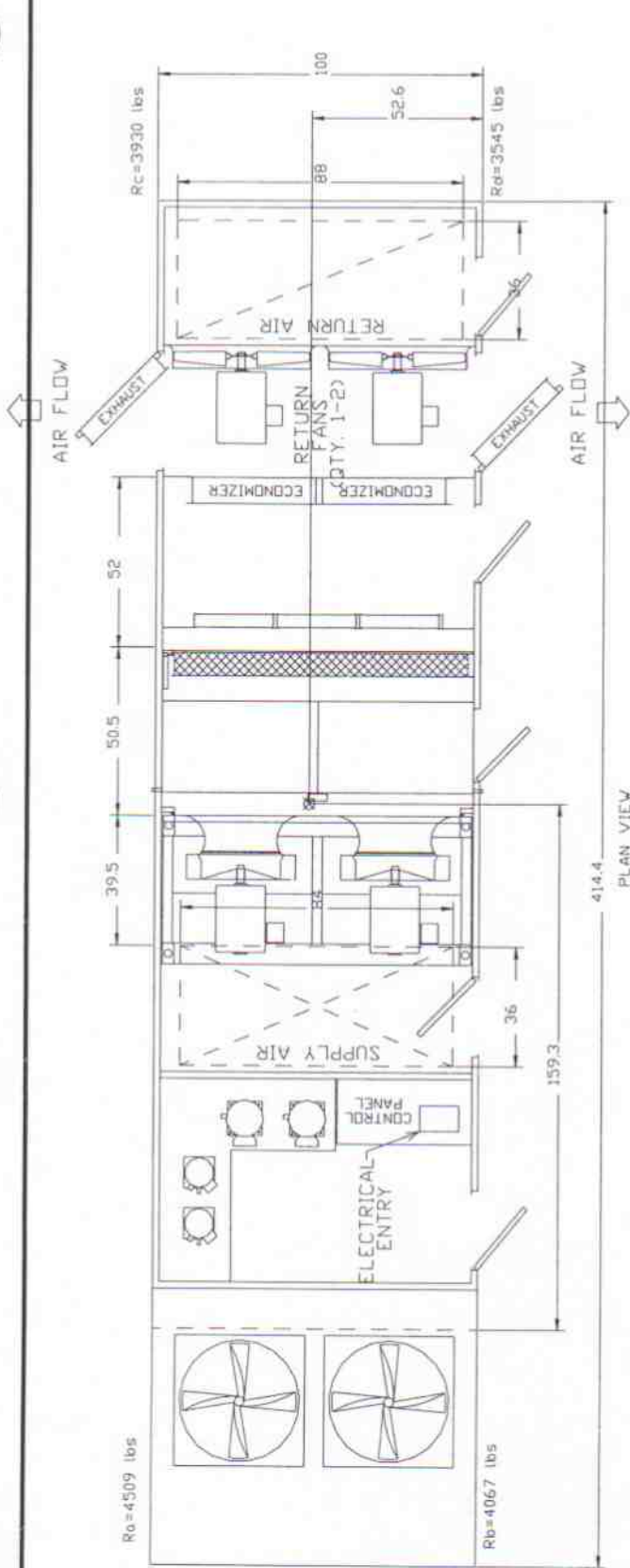
Ordered By: USE ECAT PROGRAM

Engineer:

SERIAL NO.:

DATE: 02/04/2002

UNIT TAG: RTU# 1



AADON inc.

TULSA OKLAHOMA

Total Weight: 16051 / Shipping Weight: 16051

Configurator: RL-045-3-0-AA02-000CCCCF-D00-EBF-A00-0000000-00-0000000008

JOB NAME: TYPICAL DRAWINGS TO SHOW FEATURE OPTIONS

UNIT TAG: RTUM 2

PURCHASER:

PURCHASE ORDER:

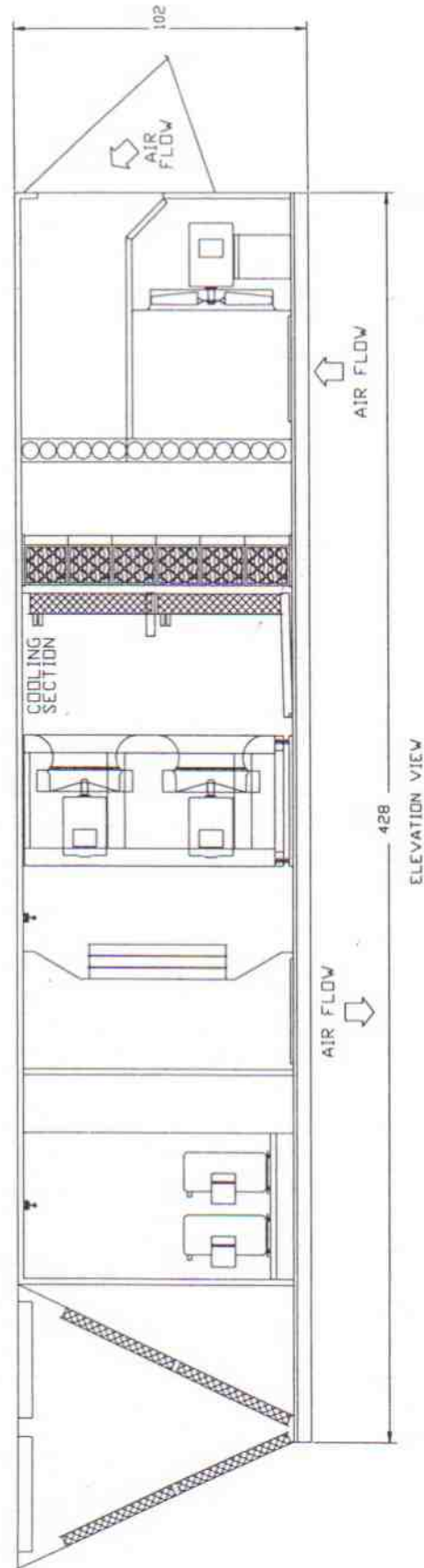
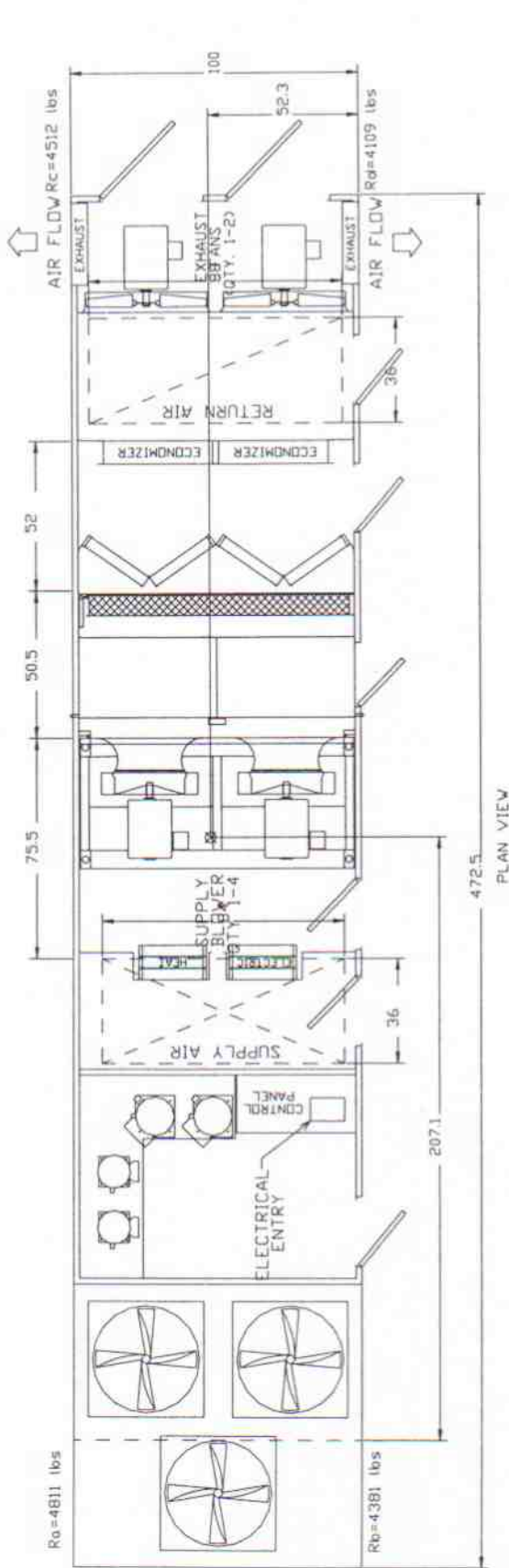
Rep Contact: NOT FOR JOB USE

Ordered By: USE ECAT PROGRAM

SERIAL NO.:

Engineer:

DATE: 02/04/2002



AAON inc.

TULSA OKLAHOMA

Total Weight: 17812 / Shipping Weight: 17812

Configurator: RL-095-3-0-AA02-131BDAD-D00-EAE-AA0-00000000-00-00000000B
 JOB NAME: TYPICAL DRAWINGS TO SHOW FEATURE OPTIONS

UNIT TAG: RTUM 3

PURCHASER:

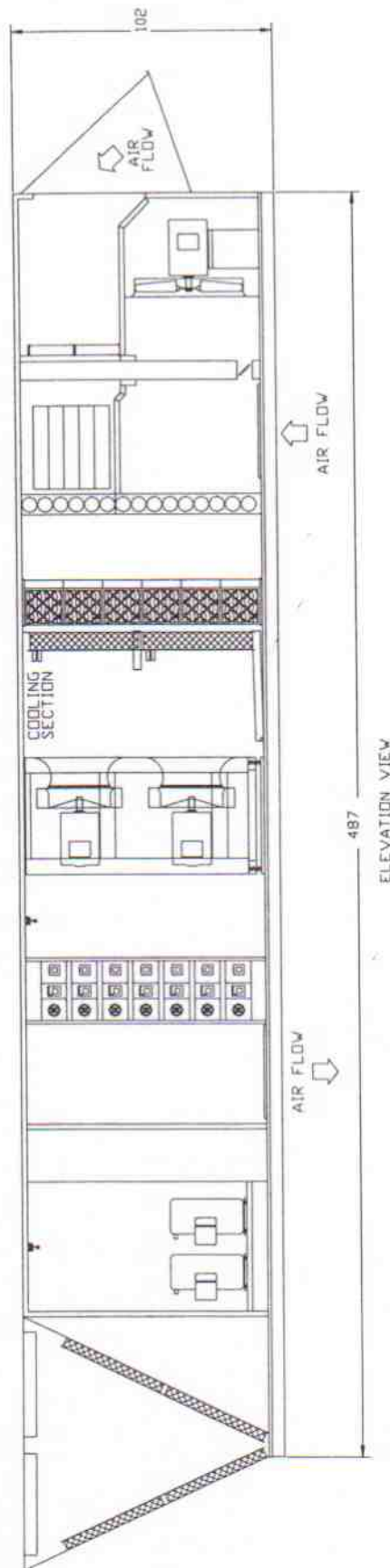
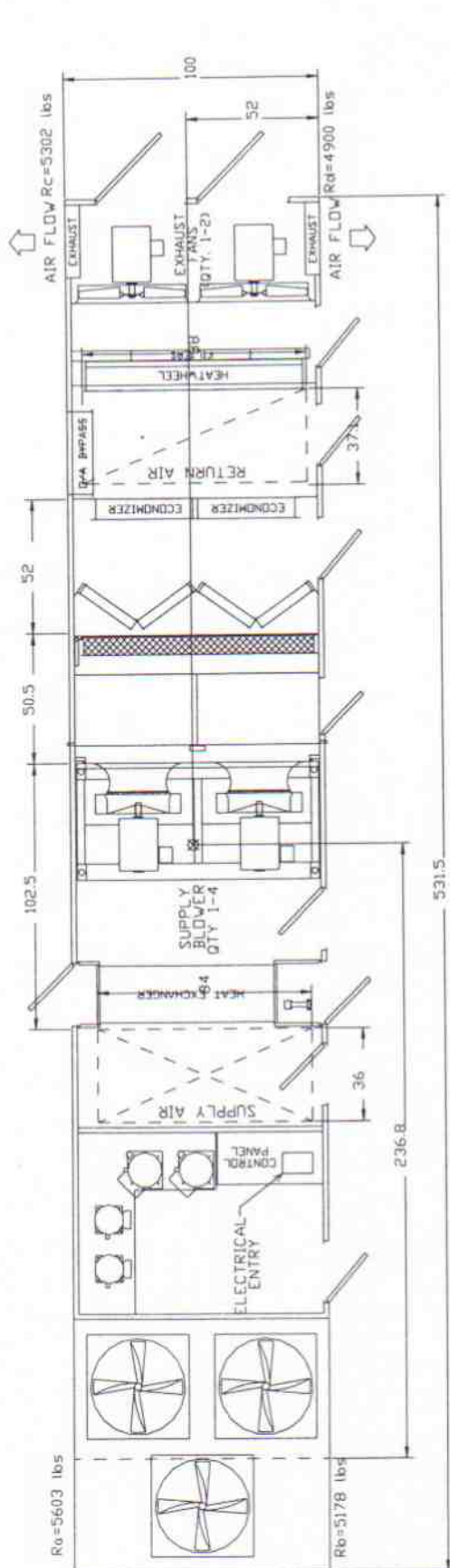
PURCHASE ORDER:

SERIAL NO.:

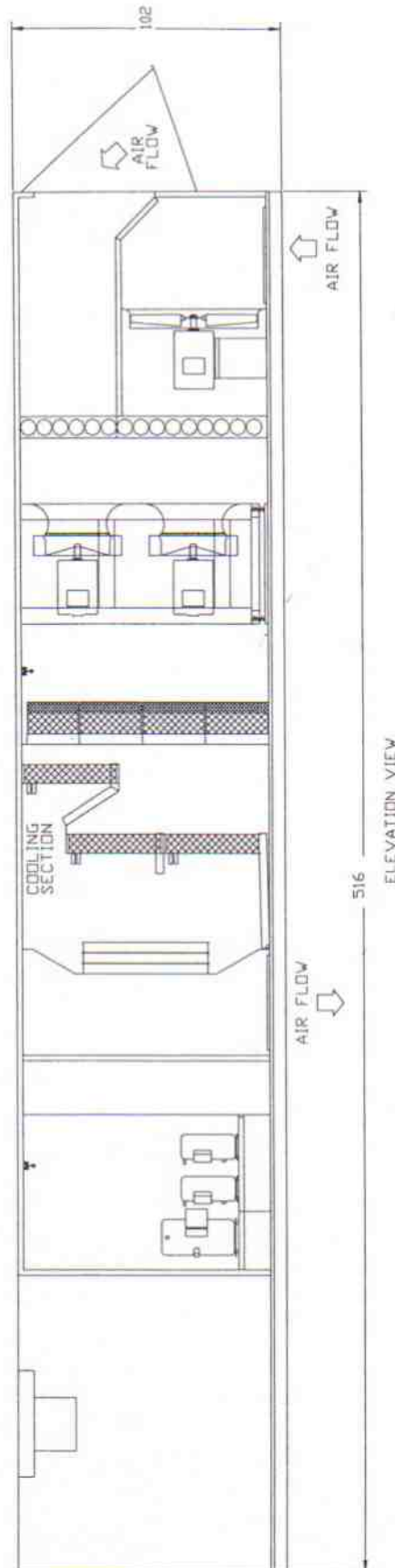
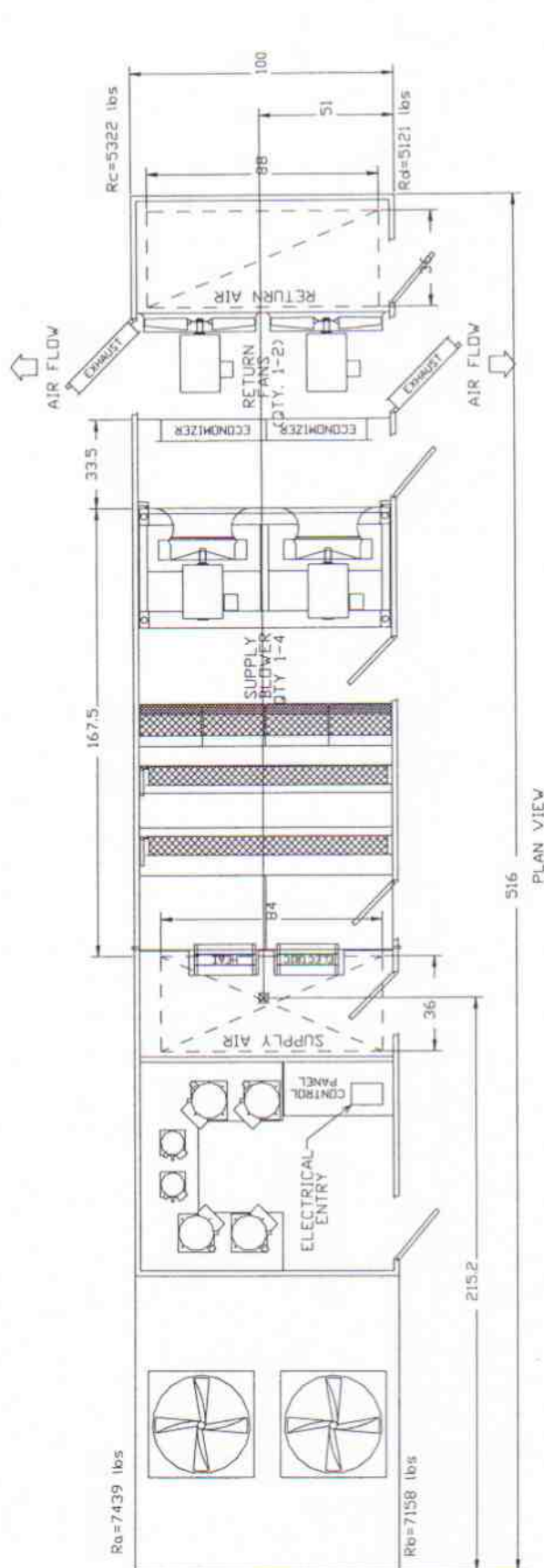
DATE: 02/04/2002

Ordered By: USE ECAT PROGRAM

Engineer:



<p>AADON inc. TULSA OKLAHOMA</p> <p>Total Weight: 20983 / Shipping Weight: 20983</p>	<p>Configurator: RL-095-3-0-AA02-222-DCCG-D00-FAE-AA00-00000000-00-0000000008</p> <p>JOB NAME: TYPICAL DRAWINGS TO SHOW FEATURE OPTIONS</p> <p>PURCHASER:</p> <p>Rep Contact: NOT FOR JOB USE</p>	<p>UNIT TAG: RTU# 4</p> <p>SERIAL NO.:</p> <p>Engineer:</p>	<p>DATE: 02/04/2002</p>



AAON inc.

TULSA OKLAHOMA

Total Weight: 25041 / Shipping Weight: 20641

Configurator: RL-135-3-0-0F02-161CDDF-D00-FAY-DNC-FDA8000-00-0B0000A0B

JOB NAME: TYPICAL DRAWINGS TO SHOW FEATURE OPTIONS

PURCHASER:

PURCHASE ORDER:

Rep Contact: NOT FOR JOB USE

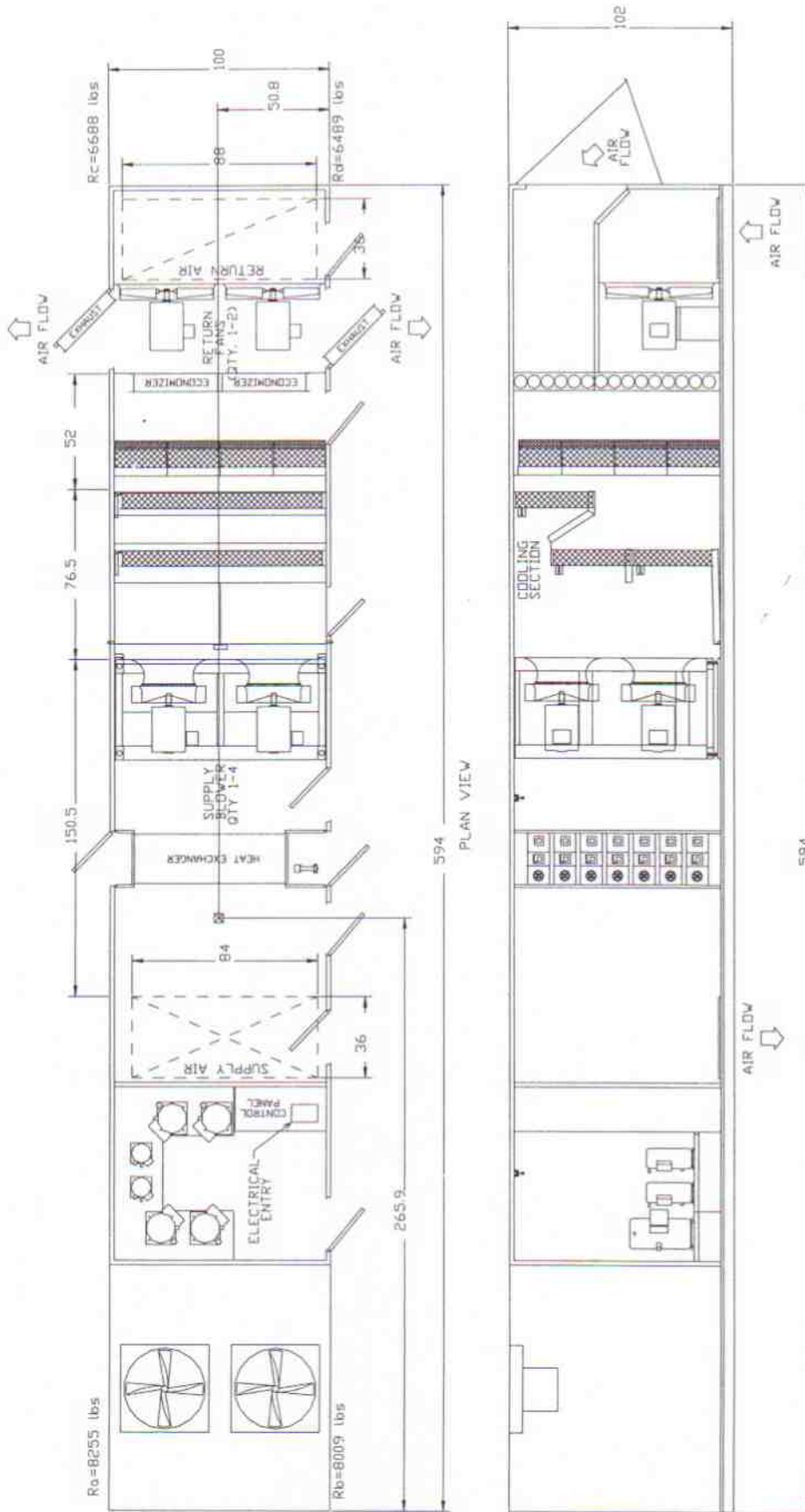
Order By: USE ECAT PROGRAM

Engineer:

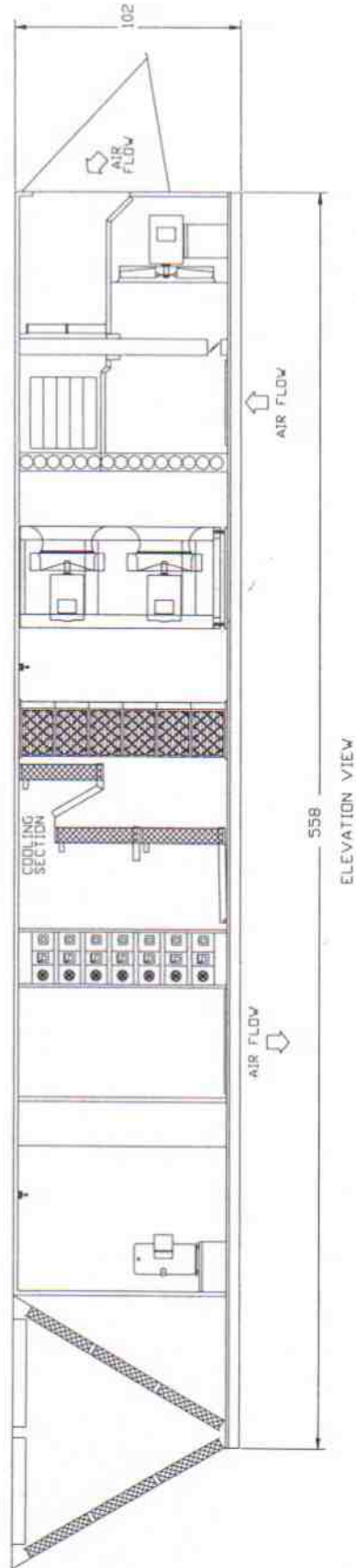
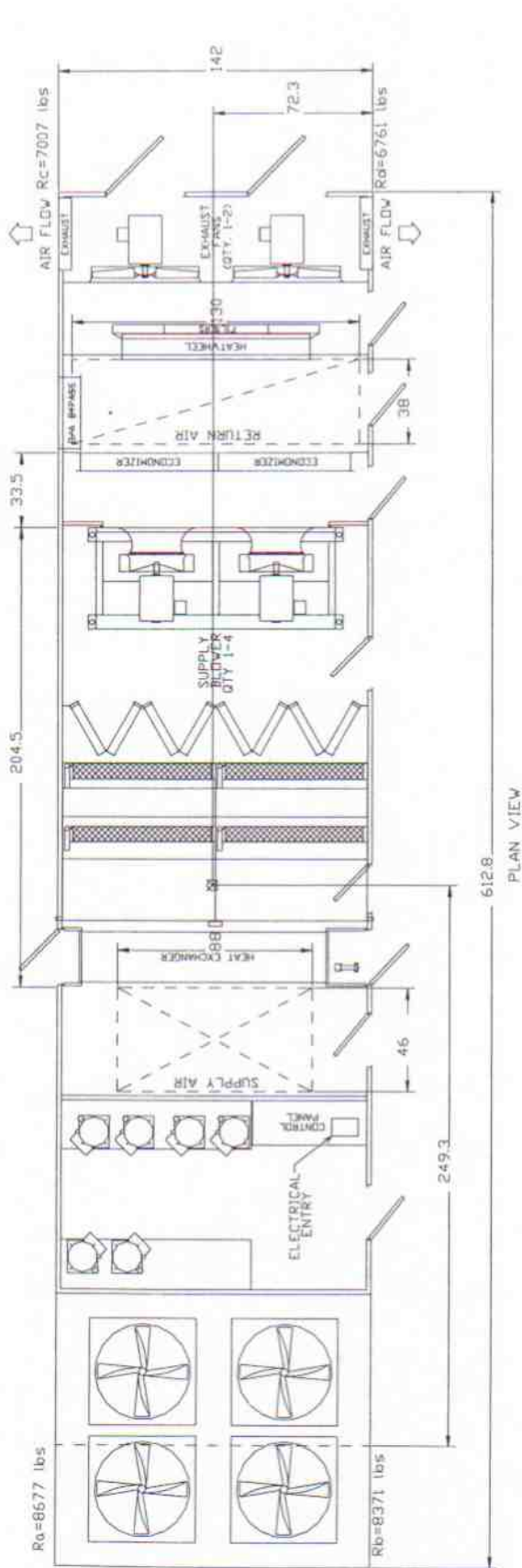
DATE: 02/04/2002

SERIAL NO.:

UNIT TAG: RTU# 5



<p>AAOON inc, TULSA OKLAHOMA</p>	<p>UNIT TAG: RTUH 6</p>	<p>Configurator: RL-135-3-0-AF02-223-CDCF-D00-FAY-DNC-F0AB000-00-ED0000A0B</p>	<p>DATE: 02/04/2002</p>
<p>Total Weight: 29442 / Shipping Weight: 25042</p>	<p>Serial No: _____</p>	<p>Rep Contact: NOT FOR JOB USE</p>	<p>Engineer: _____</p>
<p>PURCHASER: _____</p>	<p>PURCHASE ORDER: _____</p>	<p>Ordered By: USE ECAT PROGRAM</p>	<p>Engineer: _____</p>



AAON inc,

TULSA OKLAHOMA

Total Weight: 30816 / Shipping Weight: 30816

Configurator: RL-170-3-0-0A02-233-JCDN-D00-EC2-000-000C000-00-00000A00B

JOB NAME: TYPICAL DRAWINGS TO SHOW FEATURE OPTIONS

PURCHASER:

PURCHASE ORDER:

Rep Contact: NOT FOR JOB USE

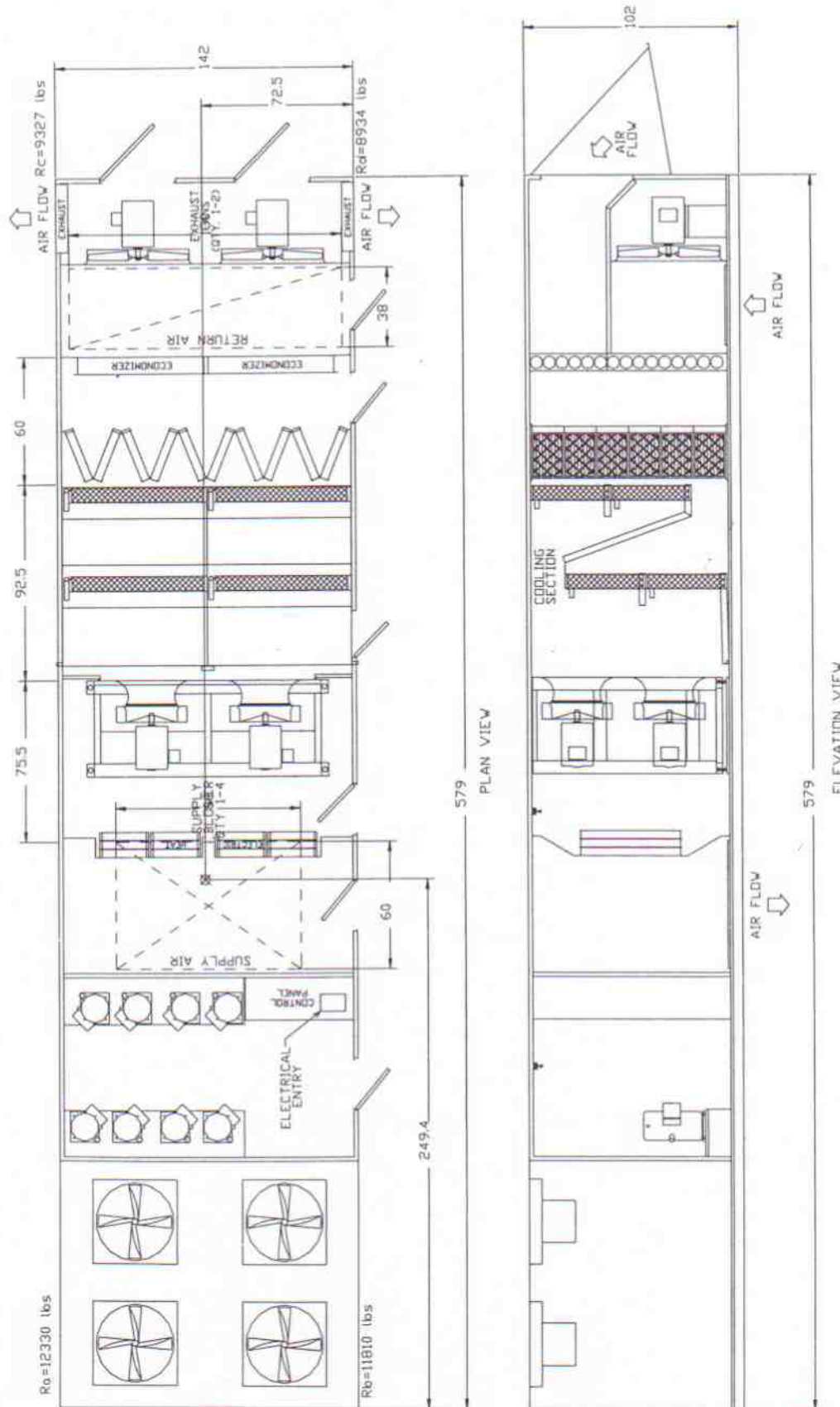
Ordered By: USE ECAT PROGRAM

SERIAL NO.:

DATE: 02/04/2002

Engineer:

UNIT TAG: RTU# 7



AADN inc.

TULSA OKLAHOMA

Total Weight: 42401 / Shipping Weight: 35901

Configurator: RL-230-3-0-AF02-172BDBH-D00-GCH-A00-000D00-00-000000A0B

JOB NAME: TYPICAL DRAWINGS TO SHOW FEATURE OPTIONS

PURCHASER:

PURCHASE ORDER:

Ordered By: USE ECAT PROGRAM

UNIT TAG: RTU# 8

SERIAL NO.:

DATE: 02/04/2002

Engineer

Cooling Coil Psychrometrics

(normal air conditioning range)

AAON, Inc.2545 South Yukon Ave
Tulsa, Oklahoma 74107

Phone: 918 583 2266 Fax: 918 583 6094

WB_{entering}=67.00 [F]
 $T_1=80.00$ [F] $w_{b1}=67.00$ [F]
 $dp_1=60.31$ [F] $w_1=0.011167$ [lbw/lba]
 $cfm_1=77788.0$ [ft³/min] $\rho_1=0.072$ [lba/ft³]
 $RH_1=51.1$ [%]

$T_2=55.00$ [F] $WB_2=54.00$ [F]
 $dp_2=53.29$ [F] $w_2=0.008632$ [lbw/lba]
 $cfm_2=73887.5$ [ft³/min] $\rho_2=0.076$ [lba/ft³]
 $RH_2=94.0$ [%]

WB_{Leaving}=54.00 [F]

If the coil is dry, the wet bulb leaving is based on
 the leaving dry bulb temperature and entering humidity ratio.

$Q_{total}=2993698.5$ [Btu/hr] 249.47 [tons]
 $Q_{sensible}=2057327.8$ [Btu/hr] 171.44 [tons]
 $Q_{latent}=936370.7$ [Btu/hr] 78.03 [tons]
 $SCFM=74892.6$ [ft³/min]
 $mfr_{air}=337016.6$ [lba/hr]
 $mfr_{condensate}=854.28$ [lbw/hr]
 $SHR=0.687$

ALTITUDE=0 [ft] PB=14.696 [psia]

AltitudeStandardCfm=75000.00 [ft³/min] $K_{sens}=1.0997$ $K_{lat}=4835$ AltStdDen=0.075 [lb_m/ft³]**Chilled Water Flow Calculator**

EWT=44.00 [F] LWT=56.00 [F]

GPM_{CHW}=498.9

Calculate

Psych sea level

Psych 3900 ft

Psych 5300 ft

Psych 7500 ft

Adiabatic MixingAltitude=0 [ft] PB=14.696 [psia] AltStdDen=0.075 [ft³/lba]

$T_1=75.000$ [F] $WB_1=60.000$ [F]
 $RH_1=41.2$ [%] $W_1=0.007592$ [lbw/lba]
 $CFM_1=24011.4$ [ft³/min]
 $h_{a,1}=26.329$ [Btu/lba]
 $M_{a,1}=105598.5$ [lba/hr]
 $v_{a,1}=13.6$ [ft³/lba]

CFM_{std,1}=23500 [ft³/min]

1

$T_3=82.600$ [F]
 $WB_3=67.316$ [F]
 $W_3=0.01079$ [lbw/lba]
 $RH_3=45.4$ [%]
 $CFM_3=44266.3$ [ft³/min]
 $h_{a,3}=31.698$ [Btu/lba]
 $M_{a,3}=190976.1$ [lba/hr]
 $v_{a,3}=13.9$ [ft³/lba]
 $CFM_{std,3}=42500$ [ft³/min]

3

$T_2=92.000$ [F] $WB_2=75.000$ [F]
 $RH_2=45.8$ [%] $W_2=0.014701$ [lbw/lba]
 $CFM_2=20258.8$ [ft³/min]
 $h_{a,2}=38.368$ [Btu/lba]
 $M_{a,2}=85377.5$ [lba/hr]
 $v_{a,2}=14.2$ [ft³/lba]
 $CFM_{std,2}=19000$ [ft³/min]

2

AAON, Inc.2425 South Yukon Ave
Tulsa, Oklahoma 74107

Phone: 918 583 2266 Fax: 918 583 6094

All CFM Input are actual air conditions CFMstd Output are Altitude Standard Air Conditions

Calculate

Sea Level

3900 ft

5300 ft

7500 ft

MIXED AIR CONDITIONS**Purpose:**

Use this routine to determine the Mixed Air Conditions for Blow Through Systems when the Cooling Coil Entering Conditions and CFM_{SA} are known.

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Tulsa, Oklahoma 74107
Phone: 918 583 2266 Fax: 918 583 6094

CCEADB=84.11 [F]

CCEAWB=67.58 [F]


MADB=80.99 [F]

MAWB=66.59 [F]

CFM_{SA}=18500.0 [ASCFM]

Qty=3

BHP=7.44 [bhp]

 η_{Motor} =89.5 [%] Calculate


ALTITUDE=0 [ft]

PB=14.7 [psia]

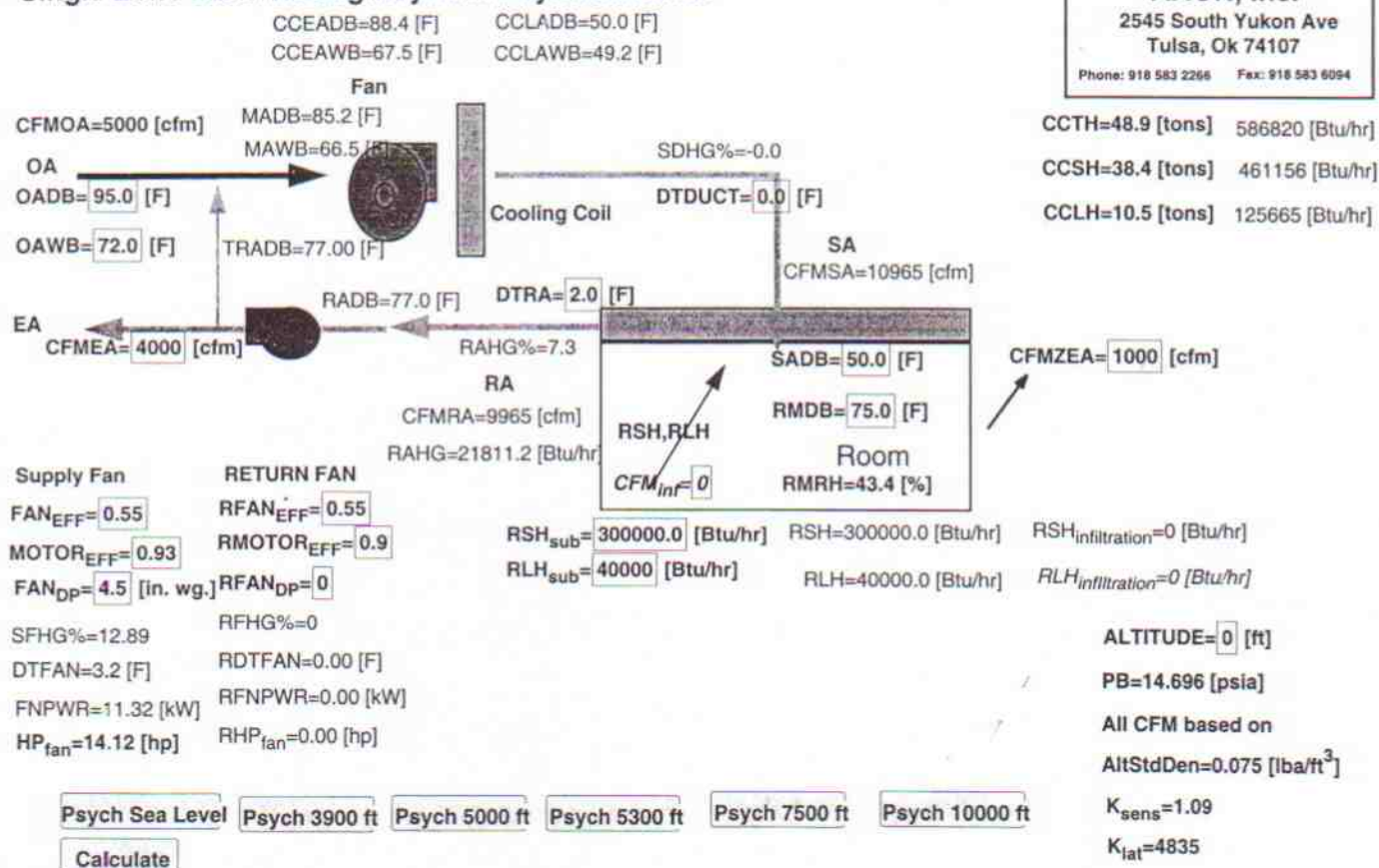
AAON, INC.

Tulsa, Oklahoma 74107
2545 South Yukon Ave

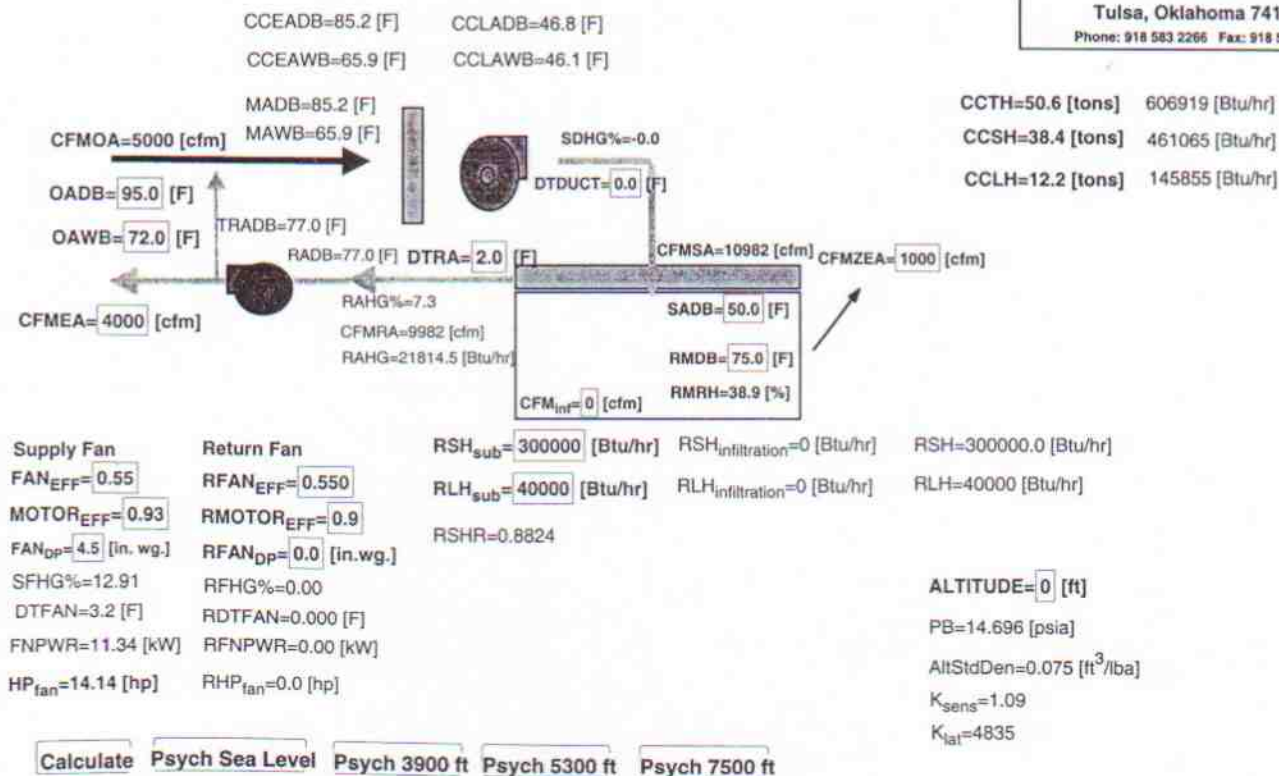
Phone: 918 583 2266 Fax: 918 583 6094

Fan Law CalculatorRPM_{base}=1200.0NewRpm₁=1200.0NewRpm₂=1200.0NewRpm₃=1200.0cfm_{base}=10000.0 [cfm]NewFanCFM₁=8750.0 [cfm]NewFanCFM₂=8750.0 [cfm]NewFanCFM₃=8750.0 [cfm]SP_{base}=4.000 [in.wg.]NewFanSP₁=4.000 [in.wg.]NewFanSP₂=4.000 [in.wg.]NewFanSP₃=4.000 [in.wg.]BHP_{base}=10.0 [hp]NewFanBhp₁=8.7 [bhp]NewFanBhp₂=8.8 [bhp]NewFanBhp₃=8.7 [bhp] η_{base} =63.0 [%]NewFan $\eta_{\text{TA},1}$ =63.032 [%]NewFan $\eta_{\text{TA},2}$ =63.032 [%]NewFan $\eta_{\text{TA},3}$ =63.032 [%]Dia_{base}=27.00 [in.]NewDiameter₁=27.0 [in.]NewDiameter₂=27.0 [in.]NewDiameter₃=27.0 [in.]Width_{base}=8.0 [in.]NewWidth₁=7.0 [in.]NewWidth₂=7.0 [in.]NewWidth₃=7.0 [in.] Calculate

Single Zone Blow Through System Psychrometrics



Single Zone Draw Through System Psychrometrics



AAON, Inc.

 2545 South Yukon Ave
 Tulsa, Ok 74107

Phone: 918 583 2266 Fax: 918 583 6094

AAON, Inc.

 2425 South Yukon Ave
 Tulsa, Oklahoma 74107

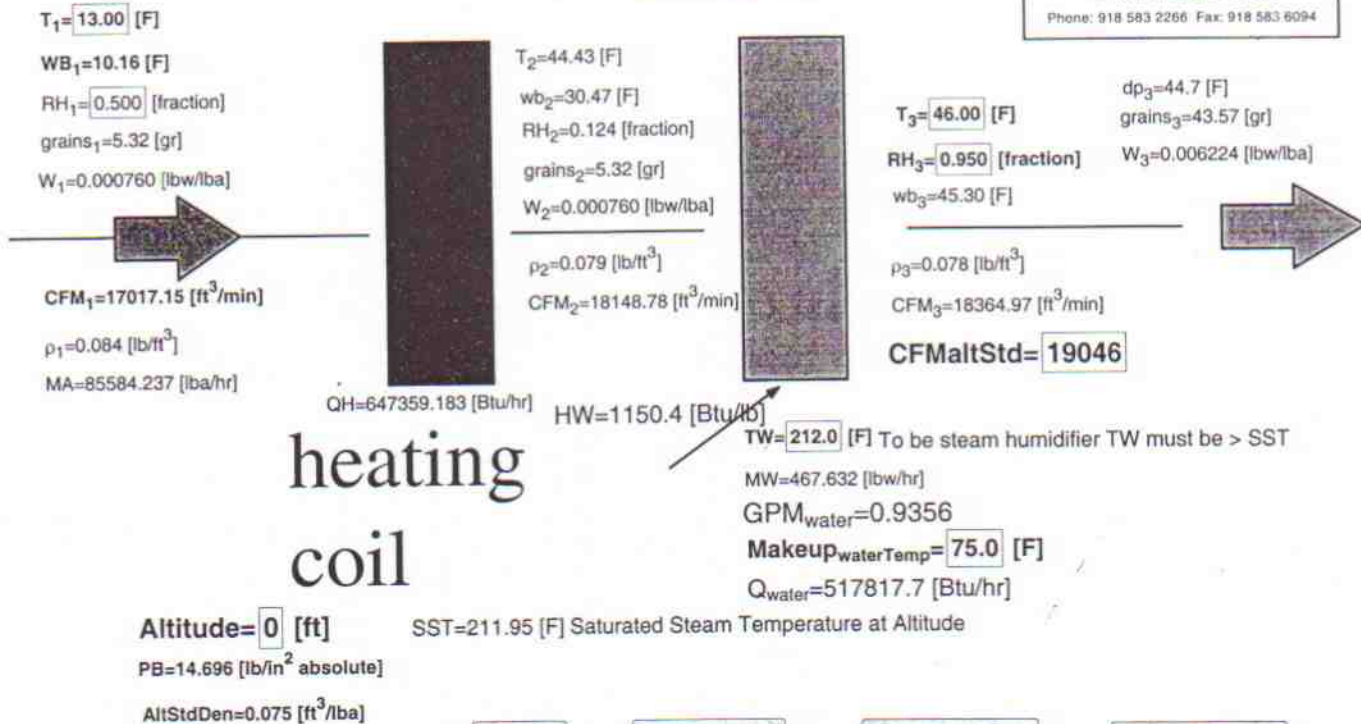
Phone: 918 583 2266 Fax: 918 583 6094

humidifier

AAON, Inc.

2545 South Yukon Ave
Tulsa, Oklahoma 74107

Phone: 918 583 2266 Fax: 918 583 6094



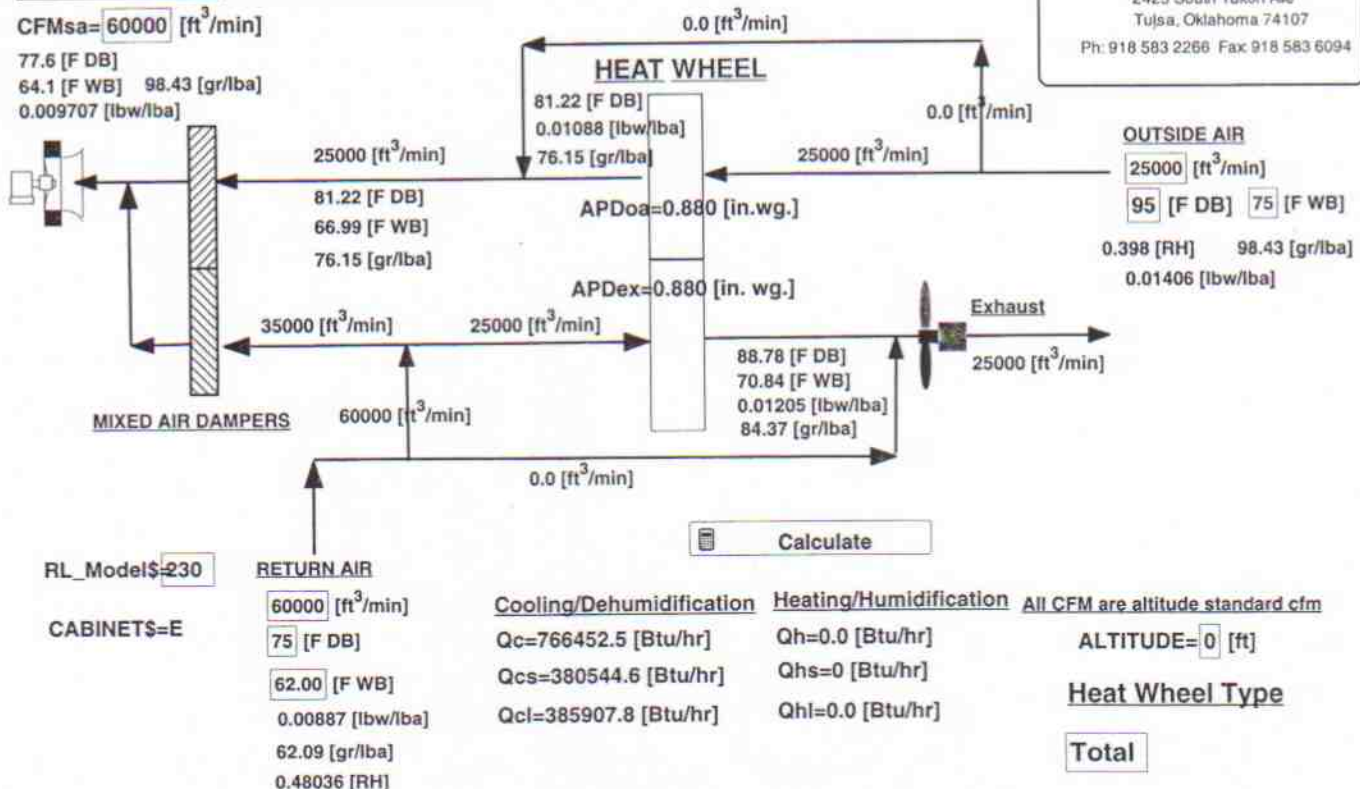
HeatWheel

Heat Wheel Model # ERC-81146 Quantity of Heat Wheels 2

AAON Inc.

2425 South Yukon Ave
Tulsa, Oklahoma 74107

Ph: 918 583 2266 Fax: 918 583 6094



Langelier Saturation Index Calculator

T= 101.7 [F] 38.7 [C]

pH= 7.100

TDS= 660.0 [mg/L]

Calcium= 392.0 [mg/L as CaCO₃]Alkalinity= 76.0 [mg/L as CaCO₃]Conductivity_{Approximate}=1453 [micro-mho/cm]

LSI=-0.1396

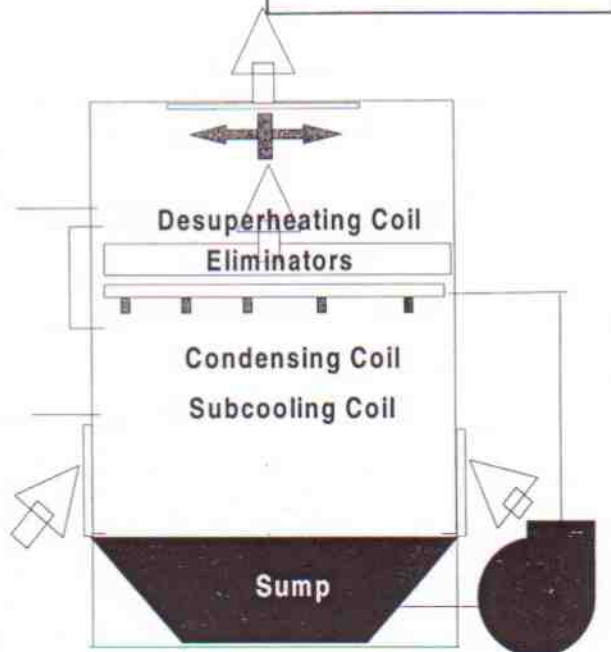
Border Line Scale Potential

 LSI Calculator Internet Link to Information on Corrosion**AAON Inc.**

2425 South Yukon Ave

Tulsa, Oklahoma 74107

Phone: 918 583 2266 Fax: 918 583 6094


**Sensible Heating**

ALTITUDE= 0 [ft] PB=14.70 [psia]

T₁= 80.0 [F]WB₁= 67.0 [F] MaxWB=67 [F]CFM₁=20743.5 [ft³/min]RH₁=0.511 [fraction] $\rho_1=0.072$ [lba/ft³]DP₁=60.31 [F]W₁=0.01117 [lbw/lba]

QS=50900.0 [Btu/hr]

MFA=89871.1 [lba/hr]

altstdcfm= 20000.0 [ft³/min]T₂=82.3 [F]wb₂=67.7 [F]CFM₂=20832.2 [ft³/min]RH₂=0.474 [fraction] $\rho_2=0.072$ [lba/ft³]DP₂=60.31 [F]W₂=0.01117 [lbw/lba]K_{sens}=1.102AltStdDen=0.075 [lba/ft³]Q_{SENSIBLE}= 0.0 [Btu/hr] BHP= 20.000 [hp] WATTS= 0.0 [watts] Calculate**AAON Inc.**

2425 South Yukon Ave

Tulsa, Oklahoma 74107

Ph: 918 583 2266 FX: 918 583 6094

Sensible Heating 2

ALTITUDE=0 [ft] PB=14.70 [psia]

 $T_1=60.0$ [F]WB₁=55.0 [F] MaxWB=55 [F]CFM₁=19876.3 [ft³/min]RH₁=0.732 [fraction] $\rho_1=0.075$ [lb/ft³]DP₁=51.42 [F]W₁=0.00805 [lbw/lba]

QS=438441.1 [Btu/hr]

MFA=89871.1 [lba/hr]

altstdcfm=20000.0 [ft³/min] $T_2=80.0$ [F]wb₂=62.5 [F]CFM₂=20641.3 [ft³/min]RH₂=0.370 [fraction] $\rho_2=0.073$ [lb/ft³]DP₂=51.42 [F]W₂=0.00805 [lbw/lba]K_{sens}=1.096AltStdDen=0.075 [lb/ft³]

Calculate

AAON Inc.2424 South Yukon Ave
Tulsa, Oklahoma 74107

Ph: 918 583 2266 FX: 918 583 6094

Pressure Drop Steam Piping

AtmosphericPressure=14.7 [psia]

 $\epsilon=0.00015000$ [Pipe Roughness]

Material=Commercial Steel

Calculate

LbperHr=2000 [lb/hr]

SteamPressure=50.000 [psig]

SSP=64.70 [psia]

id=2.067 [inch]

length=100.0 [Eq. ft]

Pd=4.702 [psi]

Vel_{steam, fpm}=9569.4 [ft/min]**AAON Inc.**2425 South Yukon Ave
Tulsa, Oklahoma 74107

Phone 918 583 2266 Fax 918 583 6094

Pipe Size Schedule 40

Nominal=2 inch

Pressure Drop Water Piping

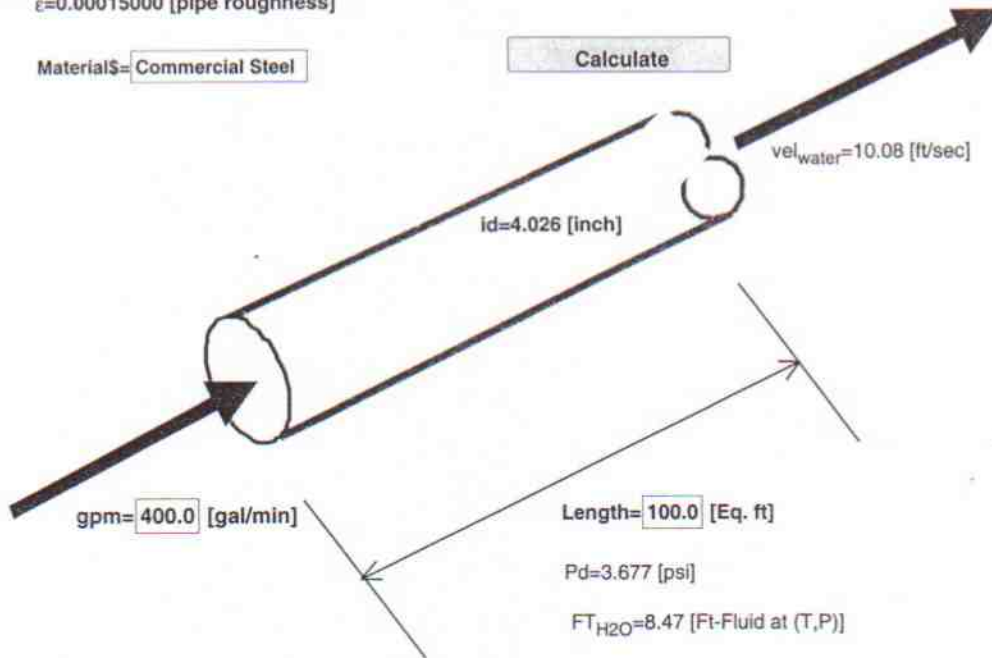
P=80.000 [psia]

t=60.000 [F]

 $\epsilon=0.00015000$ [pipe roughness]

Material=Commercial Steel

Calculate



AAON Inc.

2424 South Yukon Ave
Tulsa, Oklahoma 74107

Ph: 918 583 2266 Fx: 918 583 6094

Schedule 40 Nominal Diameter

Nominal=4 inch

Duct Pressure Drop

Altitude=0

PB=14.70 [psia]

DB=70.000 [F]

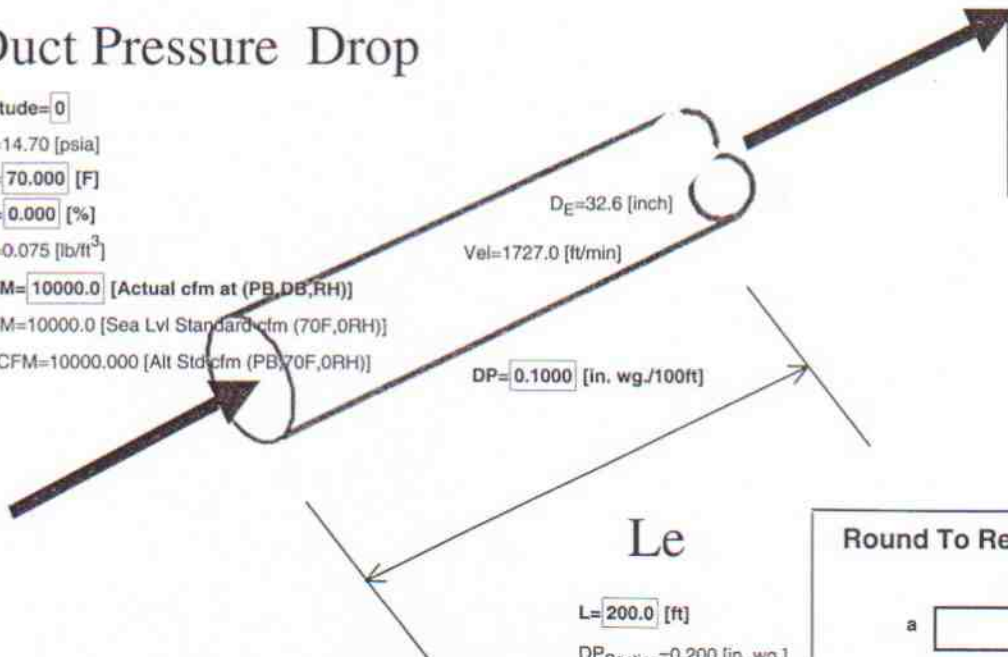
RH=0.000 [%]

 $\rho_{air}=0.075$ [lb/ft³]

ACFM=10000.0 [Actual cfm at (PB,DB,RH)]

SCFM=10000.0 [Sea Lvl Standard cfm (70F,0RH)]

AltSCFM=10000.000 [Alt Std cfm (PB,70F,0RH)]



AAON Inc.

2425 South Yukon Ave
Tulsa, Oklahoma 74107

Ph: 918 583 7407 Fax: 918 583 6094

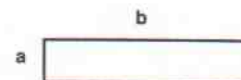
Le

L=200.0 [ft]

DP_{Section}=0.200 [in. wg.]

Calculate

Round To Rectangular Conversion



a=20.0 [inch]

b=46.4 [inch]

Vel_{actual}=1552.7 [ft/min]

**RL Series
45 to 230 tons
Packaged Rooftop Conditioners
& Air Handlers**

**Engineering Specifications
and Selection Procedures**



2425 South Yukon
Tulsa, Oklahoma 74107
Ph: (918) 583-2266
Fax: (918) 583-6094

"AAON" & "AAONNAIRE" ARE REGISTERED TRADEMARKS OF AAON, Inc., TULSA, OK.

AAON INC.

2425 S. YUKON, TULSA, OK 74107 918-583-2266

PLEASE REMIT TO:

AAON, INC. DEPT 563 TULSA, OK 74182

INVOICE

INVOICE NO. 265184

CUSTOMER NO. 848635

INV. DATE 02/28/02

PAGE 1

CUST. P. O. NO. A-0440

SOLD TO
TOBEY-KARG SALES AGENCY
4640 CAMPBELLS RUN ROAD

PITTSBURGH, PA 15205
USA

SHIP TO
WEIRTON MED CTR
C/O SCALISE INDUSTRIES
601 COLLIERS WAY
WEIRTON, WV 26062
USA

SALES ORDER NO.

254862

TERMS

NET 30 DAYS

CUSTOMER JOB NO.

WEIRTON MED CTR.

SHIP ZONE

WV

SHIP VIA

MELTON

F. O. B. POINT

TULSA OK

SHIP DATE

02/28/02

VENDOR# @ CUSTOMER

BILL OF LADING NO.

244341 - 244555

FINAL DESTINATION

414

ITEM NO.	QUANTITY SHIPPED	DESCRIPTION	UNIT	PRICE	EXTENSION
		2/5 PER REP(DEBBIE) OK TO SHIP			
		2/19. JL			
		TAX %'s SUBJECT TO CHANGE			
1	2	38221	EA		
		RL-155-3-0-AB06-000: HGC1E00GB10B0JAAC0CH000A000000X			
2	1	@FREIGHT	EA		

SUBTOTAL

TAX (0.000%)

0.00

DISCOUNT- 20 DAYS
PAYMENTS RECEIVED 20 DAYS FROM INVOICE DATE

INTEREST-1.5% PER MONTH
CHARGED BEGINNING 30 DAYS AFTER INVOICE DATE

>>> PAYMENT IN U. S. DOLLARS <<<

TOTAL

REPRINT OF ORIGINAL

1-800-970-1101 FAX 412 787 8878

TOBEY KARG SALES & SERV. - AAOB

001-008

SHIP ON 2/11/02

254862

AAON, Inc.

Order Form

Sold To Tobey Karg Sales Agency 4640 Campbell's Run Rd Pittsburgh, Pa. 15205 USA Weirton Medical Center c/o Sealife Industries 901 Colliers Way Weirton, W. Va. 26062 USA		Ship To Weirton, W. Va. 26062 USA	
Date: 11/09/01 Job Name: Weirton Medical Customer P.O. #: Customer #: Shop Order #: 778 Shop #: Action: Release To Production Notify: Please Call Marketing Code: Joe Sealife 48 Hours Before Delivery @ Phone No: 1-724-745-1100		Page 1 of 3 Job #: AAON Contact: Customer Contact: Relay #2: Mail Way: Shipping Zone:	
Qty 2 TAQUINT RTU# 13	Description RL 166-1-0-A006-000-HQ01-FA0-Q01-000-JAAC000H 00.0A000000H CPM 68000 ESP. 800	Unit Net Price [REDACTED]	Unit Price [REDACTED]
Rep Contact: Greed Hesse Ordered By: Greed Hesse		Total Net Price: Total Price (Inc. Tax): Commission \$: Total Billing \$:	

*Total Billing Amount (Tax) has been included in the Total Billing Amount on this form

Hesse

414

NY

[Signature]

 ENTERED
 NOV 14 2001

AAON, Inc.**Worksheet**

2100 South Yukon Ave. Tulsa, Oklahoma 74107-7720 Tel. (918) 583-2222 Fax (918) 583-4004

AAONEstB2 Ver. 4.00 Beta

A-1440

RL-155-3-0-AB06-000:HGC1-E00-QB1-0B0-JAAC00H-00-0A000000B
Tag: RTU# 1.2Job Name:
Job Number:Winters Medical Center
Job #:Worksheet For:
Worksheet Date:Tibby Mary Sales Agency
November 19, 2001

	Base/Option	Description	List Price	Rep. Price	Cust. Price
R	Roof Top	Roof Top Unit			
L	Generator	Engine Generator			
155	Size	One Hundred and Fifty Five			
3	Voltage	480V/3/3/3/3/3			
0	Interior Protection	Standard			
A	Cooling Style	Draw Thru-R22 Dual Circulated Compressor			
B	Cooling Configuration	Air Cooled Cond w/ 6R coil High CFM			
0	Cooling Cooling	Std			
8	Cooling Stages	5 Stages			
0	Heating Type	No Heat			
0	Heating Designation	No Heat			
0	Heating Stages	No Heat			

	Feature Option	Description	List Price	Rep. Price	Cust. Price
H	1A. Outside Air Option	Heat Wheel Small (S) (1.14 inch wheel)			
G	1B. SA Blower Configuration	2 Blowers (Pre- or Post- or 2-motor 2-VFD)			
C	1C. SA Blower	Blower 2 (42" Dia 12 Blade)			
1	1D. SA Motor	25.0 hp (1760 rpm)			
E	2. Outside Air Controls	DDC Room Control			
0	3. Discharge Location	Return Discharge			
0	4. Return Location	Return Return			
Q	5A. SA Blower Configuration	4 Blowers w/ Pre- or Post- or 4-VFDs			
B	5B. SA Blower	Blower 3 (30" Dia 12 Blade)			
1	5C. SA Motor	25.0 hp (1760 rpm)			
0	6A. Pre-Filter	2 Filtered			
B	6B. Final Filter	17 Cartridge 25X 22-Filter Box B			
0	6C. Filter Options	Std			
J	7. Refrigeration Controls	6 MTIR On & Off + 20 STDR + 115V Outdoor Fan			
A	8. Refrigeration Options	Hot Gas Bypass Load Stack (HGB)			
A	9. Refrigeration Accessories	Quick-Start			
C	10. Sensor Options	CO2 Air - Room Network			
0	11. Safety Options	Std			
6	12. Controls	Std			
H	13. Control Controls	2-11 Control of DDC Controls by Others			
0	14A. Fuel Heat Configuration	Std Pre-Heat			
0	14B				
0	15. Fuel Heat Stages	Std No Pre-Heat			
0	16. Fuel Heat Stages				
A	17. Fuel Heat Stages				
0	18. Fuel Heat Stages				
0	19. Fuel Heat Stages				
U	20. Fuel Heat Stages	Std Pre-Heat			
0	21. Fuel Heat Stages	Std Pre-Heat			
0	22. Fuel Heat Stages	Std Pre-Heat			
B	23. Fuel Heat Stages	Std Pre-Heat			
	Subtotal				
	Quantity				
	Total				

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AAONBeat52 Ver. 4.00 Beta

A-0440

RL-155-3-0-AB06-000:HGC1-E00-QB1-0B0-JAAC00H-00-0A000000B
Tag: RTU# 1,2

Job Name:
Job Number:

Weirton Medical Center
Job #1

Submittal For:
Submittal Date:

Tobey-Karg Sales Agency
November 19, 2001

	Base Option	Description
R	Series	Roof Top Unit
L	Generation	Eight's Generation
155	Size	One Hundred and Fifty Five
3	Voltage	460V/3Ø/60Hz
0	Interior Protection	Standard
A	Cooling Style	Draw Thru-R22 Dual Circuited Compressors
B	Cooling Configuration	Air Cooled Cond w/ 5R coil High CFM
0	Cooling Coating	Std
6	Cooling Stages	6 Stage
0	Heating Type	No Heat
0	Heating Designation	No Heat
0	Heating Stages	No Heat

	Feature Option	Description
H	1A. Outside Air Options	Heat Wheel Small (S) (1-74 inch wheel)
G	1B. RA Blower Configuration	2 Blowers (Prem eff mtr) w/ 2-motors 2-VFD
C	1C. RA Blower	Blower C (42" Dia 12 Blade)
1	1D. RA Motor	25.0 hp (1760 rpm)
E	2. Outside Air Controls	DDC Econ Control
0	3. Discharge Location	Bottom Discharge
0	4. Return Location	Bottom Return
Q	5A. SA Blower Configuration	4 Blowers w/(Prem eff mtr) w/4-VFD's
B	5B. SA Blower	Blower B (30" Diameter)
1	5C. SA Motor	25.0 hp (1760 rpm)
0	6A. Pre-Filter	2" Pleated
B	6B. Final Filter	12" Cartridge 85% Eff-Filter Box B
0	6C. Filter Options	Std
J	7. Refrigeration Controls	5 MTDR On & Off + 20 STDR + 115V Outlet Factory Wired
A	8. Refrigeration Options	Hot Gas Bypass Load Stage (MGB)
A	9. Refrigeration Accessories	Sight Glass
C	10. Power Options	500 Amps Power Switch
0	11. Safety options	Std
0	12. Controls	Std
H	13. Special Controls	Field Installed DDC Controls by Others
0	14A. Pre-Heat Configuration	Std (No Preheat)
0	14B. Pre-Heat Sizing	Std (No Preheat)
0	15. Option Boxes	Std
A	16. Cabinet Options	Stainless Steel Drain Pans
0	17. Cabinet Options	Std
0	18. Customer Code	Std
0	19. Code Options	Std ETL USA Listing
0	20. Unit Splits	Std (One Piece Unit)
0	21. Evap & Water Condenser	Std (No Evap or Water Condenser)
0	22. Blank	Std
B	23. Type	Std (Includes 'Grav Paint')

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AAONZcat32 Ver. 4.00 Beta

A-0440

RL-155-3-0-AB06-000:HGC1-E00-QB1-0B0-JAAC00H-00-0A000000B

Tag: RTU# 1,2

Job Information

Job Name: Weirton Medical Center
 Job Number: Job #1
 Site Altitude: 0 ft

Unit Information

Unit Size: One forty five tons -
 Cabinet Size: D
 Approx. Op./Ship Weights: 31356 / 31184 lbs.
 Supply CFM/ESP: 52000 / 2.5 in. wg.
 Exhaust CFM/ESP/TSP: 41000 / 1.30 / 2.78 in. wg.
 Outside CFM: 11500
 Ambient Temperature: 92 °F DB / 75 °F WB

Static Pressure

External: 2.50 in. wg.
 Evaporator: 0.94 in. wg.
 Filters Clean: 0.63 in. wg.
 Dirt Allowance: 0.35 in. wg.

Economizer: 0.21 in. wg.
 Heating: 0.00 in. wg.
 Cabinet: 0.59 in. wg.
 Heatwheel: 1.30 in. wg.
 Total: 6.57 in. wg.

Cooling Section

	Gross	Net
Total Capacity:	1585.76	1369.62 MBH
Sensible Capacity:	1209.04	992.90 MBH
Latent Capacity:	376.72 MBH	
HW Total Cooling Capacity:	6.87 °F MBH	
Mixed Air Temp:	75.00 °F DB	64.00 °F WB
Entering Air Temp:	75.00 °F DB	64.00 °F WB
Lv Air Temp (Coil):	53.71 °F DB	53.64 °F WB
Lv Air Temp (Unit):	57.54 °F DB	55.20 °F WB
Supply Air Fan:	DT - 4 x 300 @ 19.98 BHP Ea.	
SA Fan RPM / Width:	1580 / 99%	
Exhaust Air Fan:	2 x MW4212-35 @ 19.19 BHP Ea.	
EA Fan RPM:	1500	
Evaporator Coil:	36.8 ft ² / 6 Rows / 12 FPI	
Evaporator Face Velocity:	599.0 fpm	
Energy Recovery Wheel:	1 x ERC-7490	

Heating Section

PreHeat Type: Std (No Preheat)
 Heating Type: No Heat

EER - ARI Listing Information

No ARI Rating Program Exists for Units Over 250 MBH
 All AAON Units Are Tested in Accordance With ARI Standards

EER @ ARI Conditions:	9.2	EER Compressor Only @ ARI Conditions:	12.0
Application EER @ Op. Conditions:	5.8	Condensing Unit EER @ Op. Conditions:	11.1

Electrical Data

Rating:	460/3/60	Minimum Circuit Amp:	492
Unit FLA:	481	Maximum Overcurrent:	500

Motors

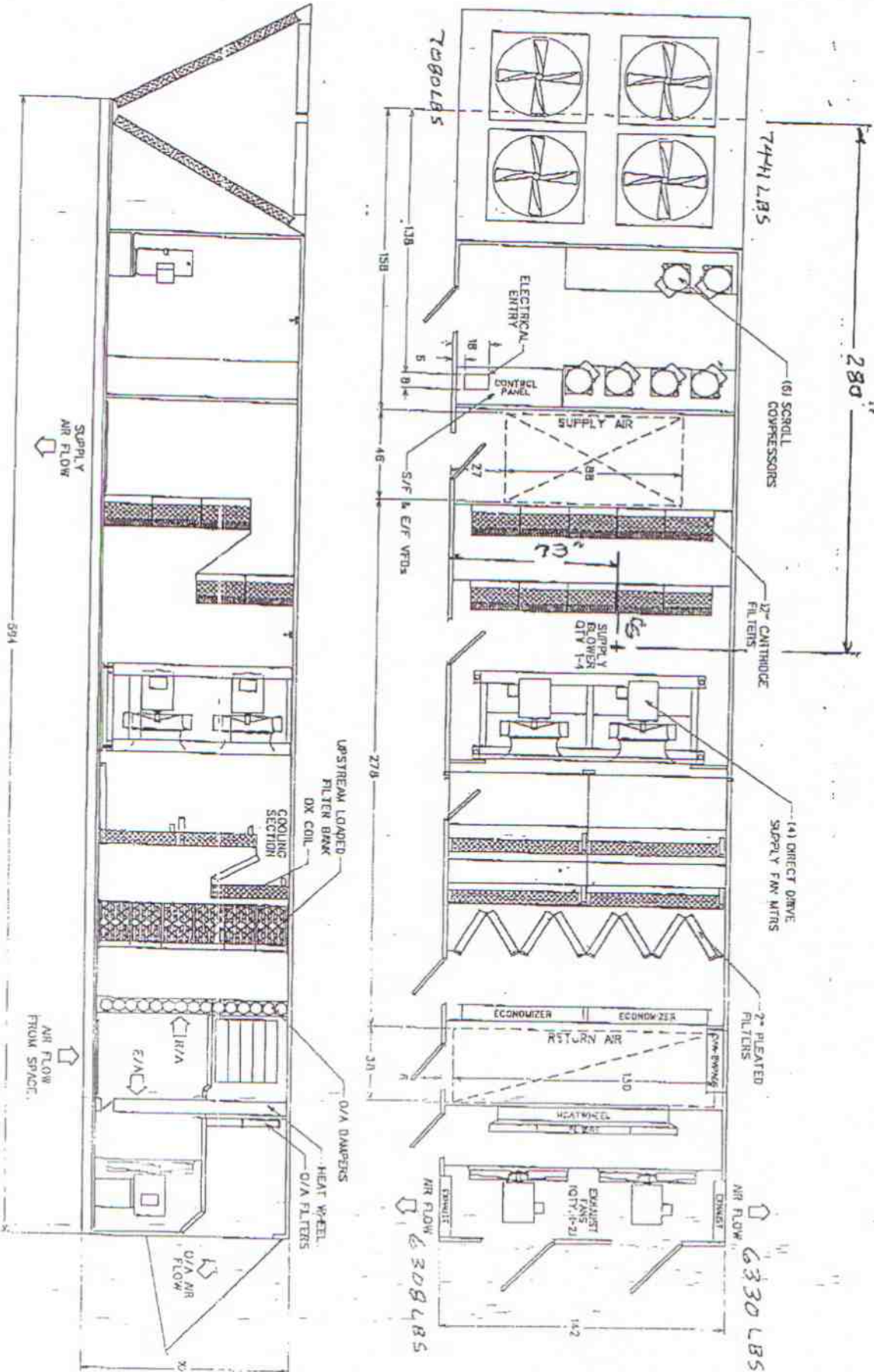
	Qty	HP	VAC	Phase	RPM	FLA	RLA
Compressor 1:	2		460	3			26.96
Compressor 2:	4		460	3			46.15
Condenser Fans:	5	5.00	460	3	1170	7.3	
Supply Fan:	4	25.00	460	3	1780	34.0	
Exhaust Fan:	2	25.00	460	3	1780	34.0	
Heatwheel:	1	0.25	250	1	1780	0.0	

Cabinet Sound Power Levels*

Octave Bands:	83	125	250	500	1000	2000	4000	8000
Discharge LW(dB):	100	99	99	101	99	97	92	85
Return LW(dB):	96	91	85	77	87	87	72	74

*Sound power levels are given for informational purposes only. The sound levels are not guaranteed.

RL155
DX COOLING, NO HEAT
HEAT RECOVERY
95% CARTRIDGE FILTERS



A-0440

SOI Tracking Form

Sales

MUST BE COMPLETE BY:

11/14/01

SOLD TO: FOREY/KARG

JOB NAME:

AAON CONTACT:

REQUESTED SHIP DATE:

2/11/02 (4)

DSO NUMBER:

PROJECTED SHIP DATE:

11/14/01

COMMENTS:

Engineering

MUST BE COMPLETE BY:

SOI REQUIRED ? ☐ YES ☐ NO

WIRING DIAGRAMS COMPLETE ? ☐ YES ☐ NO

AEN / ECN No.: ☐ N/A

SPECIAL NAMEPLATE INFORMATION: ☐ YES ☐ NO

BILL WORK REQ. ON STD. BILLS ? ☐ YES ☐ NO

SPECIAL ORDER PARTS REQ. ? ☐ YES ☐ NO

ALL UNITS CONFIGURED ? ☐ YES ☐ NO

AGENCY APPROVED ? ☐ YES ☐ NO
IF NO AGENCY APPROVAL, EXPLAIN:

COMMENTS:

PREPARED BY:

DATE GIVEN TO PROD. / INV. CNTL.:

Production / Inventory Control

MUST BE COMPLETE BY:

SPECIAL PARTS ON ORDER ? ☐ YES ☐ NO

SOI INFO. CORRECT TO ENTER ? ☐ YES ☐ NO

SPECIAL BILL WORK COMPLETE ? ☐ YES ☐ NO

COST ROLL-UP COMPLETE ? ☐ YES ☐ NO

ALL WORK ORDERS ENTERED ? ☐ YES ☐ NO

DATE GIVEN TO MANUFACTURING?:

PREPARED BY:

DATE GIVEN TO SALES:

Manufacturing

MUST BE COMPLETE BY:

SOI COMPLETE ? ☐ YES ☐ NO

WIRING DIAGRAM COMPLETE ? ☐ YES ☐ NO

NAMEPLATE INFO COMPLETE ? ☐ YES ☐ NO

SPECIAL INSTRUCTIONS COMPLETE ? ☐ YES ☐ NO

COMMENTS:

PREPARED BY:

DATE GIVEN TO PROD. / INV. CNTL.:

SPECIAL COMMENTS:

AAON, Inc.

**Memorandum
via Datafax**

To: Creed Hess
Tobey Karg

From: Jim Parro



Date: November 19, 2001

Subject: RL Selection for Weirton Medical Center

cc: B. Pohl
D. Schwartz
M. Roark

R. Schoonover
S. Hammoud

B. Smith
D. Knebel

Confirming our telephone conversation today, I review the following.

We have received and will be entering the subject order for 2 of the RL-155s. As I mentioned to you, we will be adding the net freight amount to the order of [REDACTED]

Program Error to be Corrected

While you were using the new program, you were able to key the state name directly as "W. Va." rather than using the dropdown box to point and click on "WV".

This disabled the automatic calculation of the freight amount and your printout that was sent to us indicated Zero \$ for freight.

rl11901.doc